



# first RETURNERS



3 weeks after the start of Eagle Creek Fire, this resilient fern was spotted sprouting out of burned soil.



Ferns sprouting post-Eagle Creek Fire.

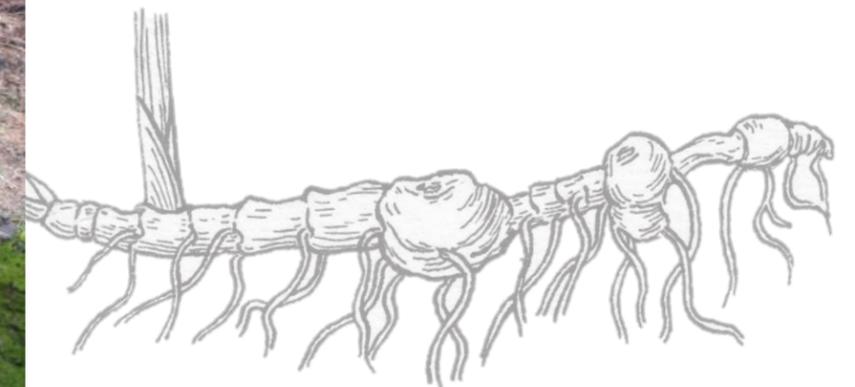


2 months post-fire, moss returns in the Bear Wallow Wilderness, Arizona.

These plants go by many names, including "pioneer species", "first colonizers", "early successional species", "post-fire specialists", "early Seral", etc.

Ferns and mosses are some of the first greenery we see after a fire.

They have rhizomes, horizontal stems tucked away underground that stay protected and often survive moderate fires.



The booster shot of nutrients available immediately after a fire makes for rich soil for the new sprouts.

# first SPRING



Photo Credit: Leonora Enking

Fireweed is an eye-catching post-disturbance plant.



Photo Credit: Wikipedia

Many look forward to the clusters of Morel mushrooms that appear in burn areas.



Photo Credit: Wikimedia Commons



Photo Credit: Mike's Birds Flickr

Keep your eyes out for Black Backed Woodpeckers, and Olive-Sided Flycatchers.

The forest is bursting with life. Cavity-nesting birds, reptiles, small mammals and even larger, such as bears, are scouting out new habitat in downed wood and snags, standing dead trees. High up on newly created perches, birds are feasting on millions of insect larvae. Black-backed woodpeckers, among others, are an “eruptive” species, thriving in response to an increased insect population build-up. Down below, plants and fungi are flourishing under the opened canopy, now sources of food that will benefit wildlife for many years to come. Foragers thrive in this edge effect; they feed on new plant growth but can return to the safety of the nearby tree cover.



Please note: collection of forest products is currently prohibited in the Columbia River Gorge Scenic Area. Nearby Mt. Hood and Gifford Pinchot National Forests allow for collection of certain special forest products.

# next FEW YEARS



A decrease in canopy cover has allowed a diversity of grasses and wildflowers to grow and mature. Conifer sprouts are appearing.

Plants continue to take advantage of increased sunlight and nutrients; with the spread of new seeds, there is green grass and shrubs virtually everywhere the fire burned. Wildlife enjoy this delicious buffet.

The forest progresses into a Complex Early Seral Forest (CESF) or snag forest, prior to a closed canopy forest growing in. These are special places, high in biodiversity and providing for tiny pollinators to plant-loving ungulates and large predators. Fish habitat, while initially degraded by increased temperatures and sediment, benefit from downed trees in streams that create cover for tiny salmon. Over the coming years, additional species of birds, rodents and reptiles will make their way back to the forest.



Pictured: Stanislaus National Forest, California. After the 2013 Rim fire, the forest has progressed into Complex Early Seral Stage habitat.

# twenty YEARS



For visitors to the forest, the burn areas can be hard to discern in many places. Standing snags and fallen logs provide a clue to a fire in the past. But surrounding this woody debris is thick growth made up of tall grasses, shrubs and wildflowers visited by plenty of pollinators and foragers. Logs that have fallen into creeks and streams create vital habitat for juvenile salmon and other aquatic species.

Like many high-profile fires, such as the Yellowstone fires of 1988 and the Tillamook Burn fires of 1931-1955, the plants and animals that make up the forests of the Columbia River Gorge National Scenic Area will grow, develop and provide new life. We have an extraordinary opportunity to watch this process unfold. Keep your eyes and ears open as you visit the gorge to witness the resiliency of nature.



**“Of course, no species is adapted to live in fire itself, but animals and plants can adapt to a fire regime... Plants have a distinct disadvantage, compared to animals, in the face of fires. They can’t run, fly, creep or crawl out of a fire’s path. But they have adapted to survive, and even depend on, regular fire.”**

**-Luba Mullen, Your National Forests publication**



**Yellowstone National Park, in 1988 with 800,000 acres burned, to regrowth in 2013.**

# fire MOSAIC



**Eagle Creek Fire, as is the case in most wildland fire, burned in a mosaic pattern. Mosaic patterns are mixtures of totally burned, somewhat burned, and unburned green sections of a landscape. This helps create greater diversity in wildlife habitat once regrowth begins, including the creation of places for forage, hiding cover, and breeding areas for many different species of wildlife.**